Vellore Institute of Technology
(Deemed to be University under section 3 of UGC Act, 1956)

School of Information Technology and Engineering
ITE1002 – Web Technologies Laboratory
Assessment-2

Using Javascript, Jquery, JSON, AJAX

1. A parking garage charges a $2.00 minimum fee to park for up to three hours. The garage charges an additional $0.50 per hour for each hour or part thereof in excess of three hours. The maximum charge for any given 24-hour period is $10.00. Assume that no car parks for longer than 24 hours at a time. Write a script that calculates and displays the parking charges for each customer who parked a car in this garage yesterday. You should input from the user the hours parked for each customer. The program should display the charge for the current customer and should calculate and display the running total of yesterday's receipts. The program should use the function calculate-Charges to determine the charge for each customer. Use a prompt dialog to obtain the input from the user.
2. Create a web page containing three divisions.
    a) The first division displays a digital clock on the rightmost end.
    b) The width of the first division is 100%.The second division and third division lay side by side.
    c) The second division has an image slider and third division has a color picker and two list box having font-family and size and a button. When a button is clicked the background color, font and font size should change for a whole page. Use JavaScript to implement the above.
3. Design a student registration form which takes student name, register number, DOB, program, email id, temporary address, permanent address, phone number. Validate the following using JavaScript:
    a) Mobile number should be exactly 10 digits.
    b) Register number should have alphabets and numbers only.
    c) Name should not exceed 30 characters and can be only alphabets.
    d) Email validation.
    e) Provide a checkbox saying “Permanent address is same as temporary address”. If checked, the value of permanent address should be added automatically from temp address. And should be in disabled mode.
4. Write the JavaScript code to add behavior to the following page for manipulating

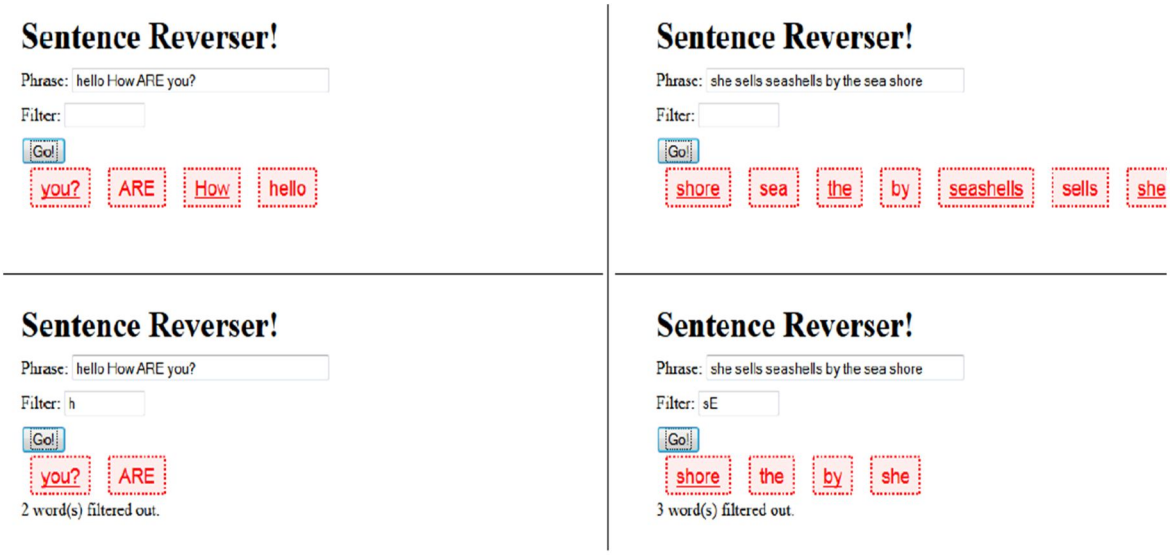
strings.

a) The page UI allows the user to type a phrase into a text box. The user can click the "Go!" button to display the words in that phrase in reverse order. Each word in the phrase should be inserted as a span with a class of word, inside a div with the id of words. Every other word (the first, third, fifth, etc.) should also be underlined

b) The user can optionally specify a "filter" text by typing into a text box with the id of filter. If a non-blank filter is specified, you should exclude any words from the phrase that contain that filter text, case-insensitively. For example, if the filter text is "abc", exclude any words containing abc, ABC, aBc, etc.

c) If any words are excluded, under the list of words you should modify the div with id of count to display text of the form, "5 word(s) filtered out". The code should work for multiple clicks of the button. On each click it should clear any previous information you injected. You may assume that words in the phrase are separated by single spaces.

d) These screenshots show the initial state, and after phrases have been typed and "Go!" is clicked.



5. Develop an online Railway Reservation application.

a) It has top frame with the name “Online Railway Reservation System” in the middle, there is a logo/image in the left corner using suitable CSS styles and the left frame with the links for Ticket booking and availability checking; for each link the target should be the right frame.

b) Create a Ticket Booking form which should have From and To in a text box, Train Names in a drop down box, Coach Number in a list box, Date in a date

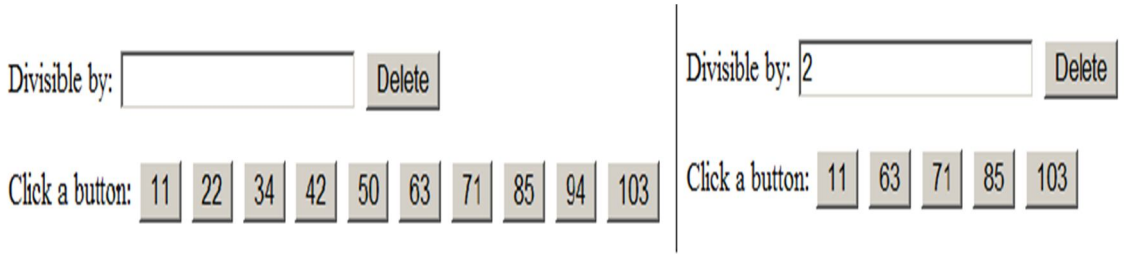
field, Timing in a text box, Passengers Male and female in a dropdown menu showing the count number and Submit and Reset button.

c) Assume availability of tickets already declared in the script. Create a DOM event to display the ticket confirmation details on any HTML element when ticket is available otherwise display "tickets not available" by invoking any other DOM event.

6. i) Design a table in the format given below using HTML and JQuery selectors.
ii) Apply different background for odd and even rows of the table.
iii) Apply different CSS for table header using JQuery selectors.

First Name	Last Name	City	State
Mannix	Bolton	Merizo	Michigan
Suki	King	Fairmont	Oklahoma
Shelby	English	Durham	Arkansas
Portia	Burns	Princeton	Rhode Island
Dacey	Young	Covina	South Carolina
Clark	Reyes	Grand Rapids	New Jersey
Maris	Decker	Sierra Madre	Georgia

7. Write the JQuery code, so that when the Delete button is clicked, any button whose text value is divisible by the number written in the text field is removed from the page. You may assume that a valid number has been typed in the text field. The HTML code is the following:
These screenshots show the initial page and its new appearance after typing 2 into the text field and pressing Delete:



8. Write the JQuery code to add behavior to the following page for keeping track of a to-do-list.

a) The page UI allows the user to type an item into a text box. The user can click the "add" button to add the item to the bottom of the list. Each word in the phrase should be inserted as a li, inside an ul with the id of list.

b) If the user wishes to remove an item he or she can type the text of the item he or

she wishes to remove in the text box and click the "remove" button. This should be case insensitive. For example, if the list only contains "foo" and the user tries to remove "FoO", it should be removed. If the user tries to remove an item that is in the list multiple times only the first occurrence should be removed.

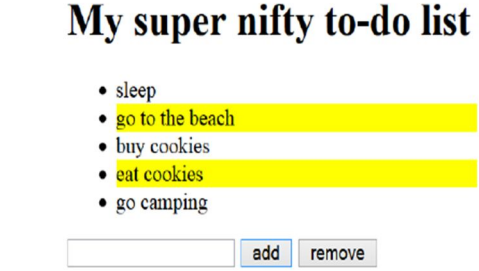
c) The items should have background colors that alternate between white and yellow (first white, then yellow, then white, yellow, etc.). This should still be the case no matter how many items are removed or added and no matter what order these operations are done in.

d) The code should work for multiple clicks of the buttons. On each click it should clear any previous information you typed in the input boxes.

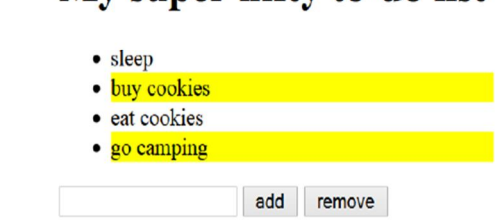
These screenshots show the state after items have been added and the state after items have been removed.

1. *Before anything has been added*

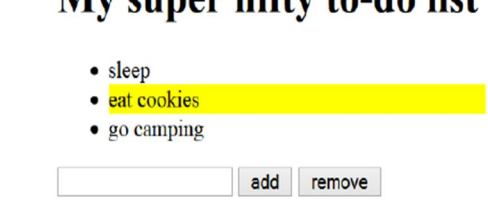
2. *After 5 items added and none removed*



3. *After remove of item "go to the beach"*

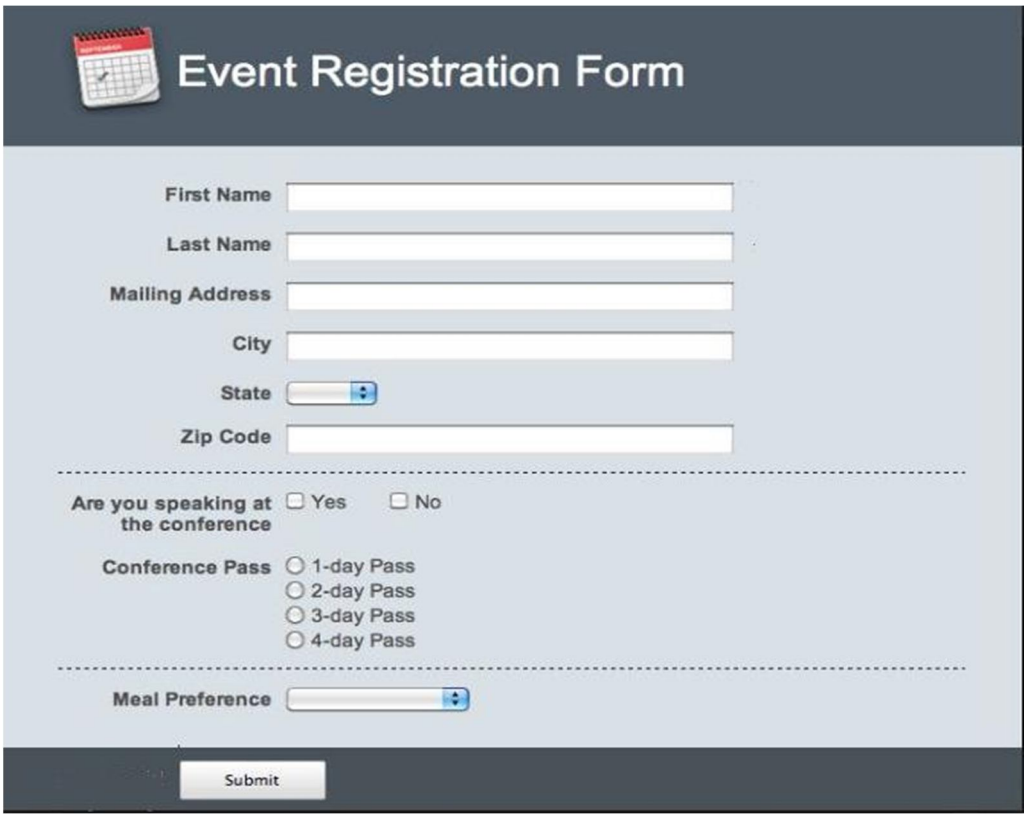


4. *After remove of item "buy cookies"*



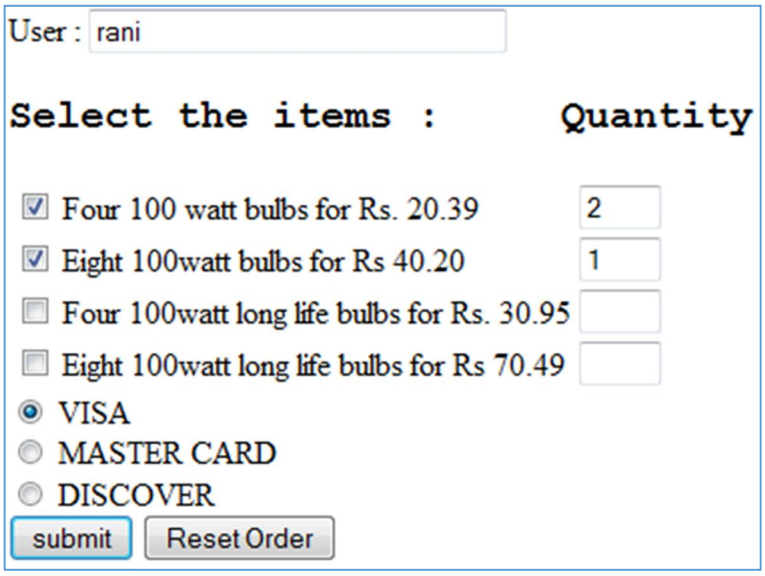
9. a) Validate the Event Registration Form given below using Jquery for the following conditions.

- All fields are mandatory
- Zip code should be exactly five digits
- Email validation



b) Create a JSON file for a list of cities. Provide autocomplete option for city field using the JSON file as source.

10. Write the XHTML code to create the form with the following capabilities
    a) A text widget to collect the users name
    b) Four check boxes, one each for the following items
        i. Four 100 watt light bulbs for Rs. 20=39
        ii. Eight 100 watt light bulbs for Rs 40=20
        iii. Four 100 watt long life light bulbs for Rs. 30=95
        iv. Eight 100 watt long life light bulbs for Rs 70=49
    c) A collection of 3 radio buttons that are labeled as follows
        i. Visa
        ii. Master Card
        iii. Discover
    d) Write an AJAX script that computes the total cost of the ordered light bulbs for the above program after adding 13.5% VAT. The program must inform the buyer of exactly what was ordered in table.



User Name:rani

You have ordered following items

Item	Qty	Price	Total
Four 100 watt bulbs for Rs. 20.39	2	20.39	40.78
Eight 100watt bulbs for Rs 40.20	1	30.95	30.95
Four 100watt long life bulbs for Rs. 30.95	0	40.2	0
Eight 100watt long life bulbs for Rs 70.49	0	70.49	0

Total bill including 13.5% tax: **81.41355** payment mode: **visa**